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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/746,171

12/21/2000

Marc Thomas Edgar

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07/28/2006

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EXAMINER

ALPERT, JAMES M

ART UNIT

PAPER NUMBER

3693

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,171

Applicant(s)

EDGAR ET AL.

Examiner

James Alpert

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following communication is in response to Applicants' amendment filed on 05/15/2006.

Status of Claims

Claims 6,8,12,16,18,22,26,28 are original. Claims 1,9-11,21,31 are currently amended. Claims 2-5,7,13-15,17,19-20,23-25,27,29-30 are previously presented. Claims 1-31 are therefore currently pending.

Response to Arguments

Applicants' arguments filed 05/15/2006 have been fully considered. With regard to the rejections under 35 U.S.C. §112, Applicants' amendments to the claims overcome the rejections, however there are newly presented grounds of rejection under §112. In addition, and with regard to the rejection under 35 U.S.C. 101, Applicants' amendments and arguments are not persuasive, and these rejections are maintained. Claims 1-31 remain rejected, and Applicants' request for allowance is respectfully declined.

Claim Rejections - 35 USC § 112

The text of 35 U.S.C. §112(2), which is not included in this action, can be found in a prior Office action. Claims 1-31 are rejected under §112(2) for failing to particularly point out and distinctly claim the invention.

First Argument

With regard to independent Claims 1,11,21,31, Applicants recite a system, computer, and methods for correlating descriptive attributes of a portfolio of assets for

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the purpose of valuation of the assets. This purpose is reflected in the idea that the asset portfolio is segmented into a first, second and/or third “valuation” portions. As well, the fourth limitation details that the system will statistically infer a value for each asset in the second and/or third valuation portion.

The claims adequately describe the process by which the first and/or second portions of the portfolio are assigned values, in that they are either computed using a full underwriting or sampling. However, what is unclear is how the assets of the second and/or third valuation portion are actually assigned a value. The reason for this appears to lie in the fact that the correlation process focuses on calculating a value for a response variable, followed by grouping the assets according to the value of the response variable, and outputting the groupings. Where is the valuation of the assets? Where are the inferred values? Appropriate correction must be made.

Second Argument

With regard to independent Claims 1,11,21, there are a few passages that remain a source of confusion.

Initially, in the second limitation, the phrases following “at least one of ...” appear to create three possible actions: fully underwriting, grouping and underwriting a sample, and computing a value. This is confusing because the examiner understands the process, as disclosed in the specification, to be that a value is computed for each asset in the first valuation portion under all circumstances. That is, the step is not performed in the alternative. The examiner would suggest placing the “computing a value” process in a separate indented step, following the offering of either fully underwriting and/or

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grouping and underwriting a sample. Should this suggestion be undertaken, additional linking would also be required to show that the computation of said values are based on or related to the full underwriting or the grouping and underwriting of a sample.

Secondly, the step that begins with the phrase “identifying at least two descriptive attribute variables ...” is confusing. The attribute variables of the second valuation portfolio are not clearly related or linked to the attribute variables of the first valuation portfolio. The examiner would suggest language such as follows:

identifying at least two descriptive attribute variables for assets included within the second valuation portion of the portfolio and correlating said variables with descriptive attribute variables stored in the database for assets included with the first valuation portion of the portfolio;

The examiner does not necessarily believe that the suggested claim is particularly clear, but that it demonstrates a linking between the attribute variables of the first and second valuation portions.

Thirdly, the use of the term “response variable” as it is used in the claims is indefinite. There is conceivably no limit to the number of different variables that could be analyzed, and while some would have a strong correlation to the attribute variables, others would not. The response variables should be related somehow to the general enterprise of valuation loan assets. Applicants may even want to consider language such as, “calculating a response variable for assets, including ...” in order to impart definitiveness to the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 101

The text of 35 U.S.C. §101, which is not included in this action, can be found in a prior Office action. Claims 1-31 are rejected under §101, as being directed to non-statutory subject matter.

Despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "*abstract ideas*". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, the courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Thus, in order for a claimed invention to be statutory, the claimed invention must produce a useful, concrete and tangible result. "Usefulness" may be evidenced by, but not limited to, a specific utility of the claimed invention. "Concreteness" may be evidenced by, but not limited to, repeatability and/or implementation without undue experimentation. "Tangibility" may be evidenced by, but not limited to, a real or actual effect. Tangible is the antonym of abstract.

In the instant application, independent Claims 1 & 31 recite steps that manipulate characteristic data obtained by analyzing assets in a portfolio to arrive at a value of a response variable for some assets in the portfolio. The assets are grouped and output for further analysis. As mentioned in the immediately prior Office action, the steps of

Claims 1 & 31 are essentially steps in a mathematical algorithm, which is an abstract idea. The question is then whether the method is useful, concrete and tangible.

In order to be useful, the claimed invention as a whole must demonstrate utility that is specific, substantial, and credible. In the instant application, the displaying of groups does not confer any benefit nor serve any apparent purpose, in that all that is revealed is assets with their response variables. This is not even in accord with the stated purpose of the claims, which is to establish a valuation of the assets in the second and/or third valuation portions.

Applicants argue in their remarks that the intended purpose of the claims, as recited in the preamble is sufficient to impart utility. They further argue that certain steps in the claims, describing computing values for assets in the first valuation portion, overcome the deficiency in the later limitations. The "Interim Guidelines for Examination of Patent Applications" shed light as to whether this argument is meritorious. Page 20 of the Guidelines, as published on the USPTO website in PDF format, recites:

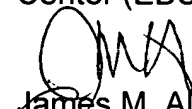
...the examiner shall review the claim to determine if the claim provides a practical application that produces a useful, tangible and concrete result. In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete."

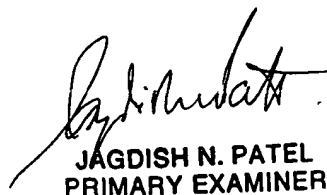
It is clear that the claims should recite something more than simply outputting the grouping the assets by values of the response variables. Applicants should consider amending the claims to detail the making of a determination as to whether to purchase a portfolio of assets, based on the values of the response variables, or something similar. Given that type of modification to the claims, there would be no question that the invention possessed the required utility.

Conclusion

THIS ACTION IS NON-FINAL. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Alpert whose telephone number is (571) 272-6738. The examiner can normally be reached on M-F 9:30-6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammel, can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.


James M. Alpert
July 24, 2006


JAGDISH N. PATEL
PRIMARY EXAMINER